

5 SEQUENCE LISTINGS

<110> Maxygen ApS

<120> Factor VII or VIIa-like molecules

10 <130> 0212WO100

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15 <160> 11

<170> PatentIn Ver. 2.1

<210> 1

20 <211> 406

<212> PRT

<213> Homo sapiens

<220>

25 <221> MOD_RES

<222> (6)..(35)

<223> Xaa = gamma carboxyglutamic acid or glutamic acid

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Cys Lys Xaa Xaa Gln Cys Ser Phe Xaa Xaa Ala Arg Xaa Ile Phe Lys
20 25 30

35 Asp Ala Xaa Arg Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp
35 40 45

40 Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln
50 55 60

Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn
65 70 75 80

45 Cys Glu Thr His Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly
85 90 95

Gly Cys Glu Gln Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys
100 105 110

50 Arg Cys His Glu Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr
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55 Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg
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Asn Ala Ser Lys Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro
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 aat gcc ttt ctg gaa gag ctc cgc cct ggc tcc ctg gaa cgc gaa tgc 165
 Asn Ala Phe Leu Glu Glu Leu Arg Pro Gly Ser Leu Glu Arg Glu Cys
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 aaa gag gaa cag tgc agc ttt gag gaa gcc cgg gag att ttc aaa gac 213
 Lys Glu Glu Gln Cys Ser Phe Glu Glu Ala Arg Glu Ile Phe Lys Asp
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 gct gag cgg acc aaa ctg ttt tgg att agc tat agc gat ggc gat cag 261
 Ala Glu Arg Thr Lys Leu Phe Trp Ile Ser Tyr Ser Asp Gly Asp Gln
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 tgc gcc tcc agc cct tgc cag aac ggg ggc tcc tgc aaa gac cag ctg 309
 Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln Leu
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 cag agc tat atc tgc ttc tgc ctg cct gcc ttt gag ggg cgc aat tgc 357
 Gln Ser Tyr Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn Cys
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 Glu Thr His Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly Gly
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 Cys Glu Gln Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys Arg
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 Cys His Glu Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr Pro
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 Thr Val Glu Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg Asn
 130 135 140 145
 gct agc aaa ccc cag ggc cgg atc gtc ggc ggg aag gtc tgc cct aag 597
 Ala Ser Lys Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro Lys
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 Gly Glu Cys Pro Trp Gln Val Leu Leu Val Asn Gly Ala Gln Leu
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 tgc ggc ggg acc ctc atc aat acc att tgg gtc gtg tcc gcc gct cac 693
 Cys Gly Gly Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala His
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5 Cys Phe Asp Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu Gly
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10 gaa cac gat ctg tcc gag cat gac ggg gac gaa cag tcc cgc cgg gtg 789
Glu His Asp Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg Val
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15 gct cag gtc atc att ccc tcc acc tat gtg cct ggc acg acc aat cac 837
Ala Gln Val Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn His
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20 gat atc gct ctg ctc cgc ctc cac cag ccc gtc gtg ctc acc gat cac 885
Asp Ile Ala Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp His
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25 gtc gtg cct ctg tgc ctg cct gag cgg acc ttt agc gaa cgc acg ctg 933
Val Val Pro Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr Leu
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30 gct ttc gtc cgc ttt agc ctc gtg tcc ggc tgg ggc cag ctg ctc gac 981
Ala Phe Val Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu Asp
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35 cgg ggc gct acc gct ctc gag ctg atg gtg ctc aac gtc ccc cgg ctg 1029
Arg Gly Ala Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg Leu
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40 atg acc cag gac tgc ctg cag cag tcc cgc aaa gtg ggg gac tcc ccc 1077
Met Thr Gln Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser Pro
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Asn Ile Thr Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser Lys
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Asp Ser Cys Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr Arg
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55 ggg acc tgg tac ctc acc ggg atc gtc agc tgg ggc cag ggc tgc gcc 1221
Gly Thr Trp Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys Ala
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60 acg gtg ggg cac ttt ggc gtc tac acg cgc gtc agc cag tac att gag 1269
Thr Val Gly His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile Glu
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65 tgg ctg cag aag ctc atg cgg agc gaa ccc cgg ccc ggg gtg ctc ctg 1317
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70 cgg gcc cct ttc cct tga taa 1338
Arg Ala Pro Phe Pro
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5 <211> 406
 <212> PRT
 <213> Homo sapiens

<400> 3

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 15 35 40 45
 Gln Cys Ala Ser Ser Pro Cys Gln Asn Gly Gly Ser Cys Lys Asp Gln
 50 55 60
 Leu Gln Ser Tyr Ile Cys Phe Cys Leu Pro Ala Phe Glu Gly Arg Asn
 65 70 75 80
 20 Cys Glu Thr His Lys Asp Asp Gln Leu Ile Cys Val Asn Glu Asn Gly
 85 90 95
 Gly Cys Glu Gln Tyr Cys Ser Asp His Thr Gly Thr Lys Arg Ser Cys
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 Arg Cys His Glu Gly Tyr Ser Leu Leu Ala Asp Gly Val Ser Cys Thr
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 25 Pro Thr Val Glu Tyr Pro Cys Gly Lys Ile Pro Ile Leu Glu Lys Arg
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 Asn Ala Ser Lys Pro Gln Gly Arg Ile Val Gly Gly Lys Val Cys Pro
 145 150 155 160
 30 Lys Gly Glu Cys Pro Trp Gln Val Leu Leu Leu Val Asn Gly Ala Gln
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 Leu Cys Gly Gly Thr Leu Ile Asn Thr Ile Trp Val Val Ser Ala Ala
 180 185 190
 35 His Cys Phe Asp Lys Ile Lys Asn Trp Arg Asn Leu Ile Ala Val Leu
 195 200 205
 Gly Glu His Asp Leu Ser Glu His Asp Gly Asp Glu Gln Ser Arg Arg
 210 215 220
 Val Ala Gln Val Ile Ile Pro Ser Thr Tyr Val Pro Gly Thr Thr Asn
 225 230 235 240
 40 His Asp Ile Ala Leu Leu Arg Leu His Gln Pro Val Val Leu Thr Asp
 245 250 255
 His Val Val Pro Leu Cys Leu Pro Glu Arg Thr Phe Ser Glu Arg Thr
 260 265 270
 45 Leu Ala Phe Val Arg Phe Ser Leu Val Ser Gly Trp Gly Gln Leu Leu
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 Asp Arg Gly Ala Thr Ala Leu Glu Leu Met Val Leu Asn Val Pro Arg
 290 295 300
 Leu Met Thr Gln Asp Cys Leu Gln Gln Ser Arg Lys Val Gly Asp Ser
 305 310 315 320
 50 Pro Asn Ile Thr Glu Tyr Met Phe Cys Ala Gly Tyr Ser Asp Gly Ser
 325 330 335
 Lys Asp Ser Cys Lys Gly Asp Ser Gly Gly Pro His Ala Thr His Tyr
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 Arg Gly Thr Trp Tyr Leu Thr Gly Ile Val Ser Trp Gly Gln Gly Cys
 355 360 365
 55 Ala Thr Val Gly His Phe Gly Val Tyr Thr Arg Val Ser Gln Tyr Ile
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<213> Artificial Sequence

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15 <223> Description of Artificial Sequence: Expression
cassette for expression of FVII in mammalian cells

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 agaggaacag tgcagctttg aggaagcccg ggagattttc aaagacgctg agcgggaccaa 240
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 tccatttcta gaaaagcggg acgctagcaa accccagggc cggatcgctg gcgggaaggt 600
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 cggcgggacc ctcattcaata ccatttgggt cgtgtccgcc gctcactgct tcgataagat 720
 30 taagaattgg cggaacctca tcgtgtgct cggcgaacac gatctgtccg agcatgacgg 780
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 35 ggtgtcgaac gtcccccggc tgatgaccca ggactgcctg cagcagtccc gcaaagtggg 1080
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 40 ggtgtcctg cgggcccctt tcccttgata aaagctt 1357

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<213> Artificial Sequence

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CBProFpr174

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CBProFpr226

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